(No Model.)

J. BRENZEL.

GRAIN DOOR.

No. 266,084. Patented Oct. 17, 1882.

Fig. 2

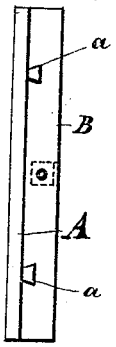


Fig. 1

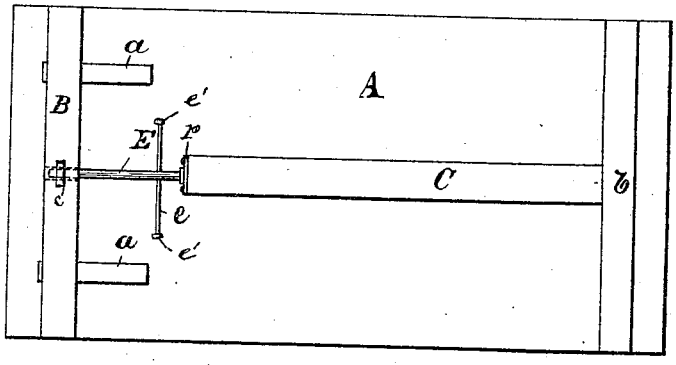


Fig. 3

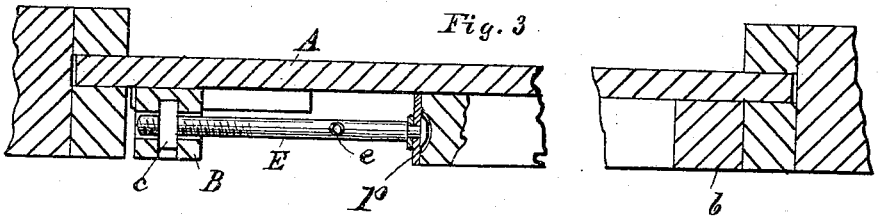


Fig. 4

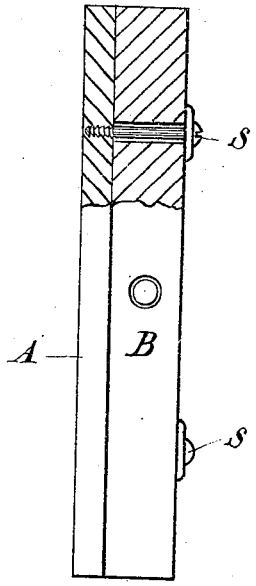
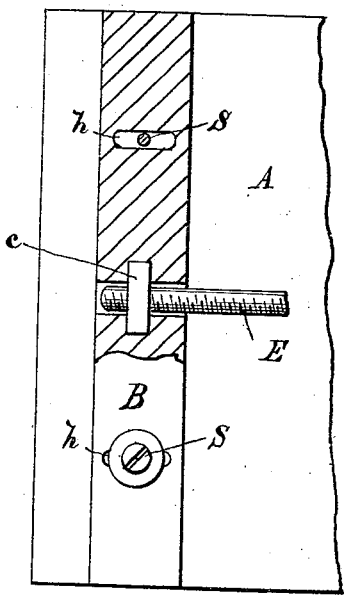


Fig. 5



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UNITED STATES PATENT OFFICE.

JACOB BRENZEL, OF CHICAGO, ILLINOIS.

GRAIN-DOOR.

SPECIFICATION forming part of Letters Patent No. 266,084, dated October 17, 1882.

Application filed May 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, JACOB BRENZEL, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Grain-Doors, of which the following is a specification.

My invention relates to improvements in grain-doors for cars.

The object of my invention is to provide a grain-door for cars which shall be adjustable to suit different cars, and so arranged that the door, when in place, may be tightened up in such a manner that no grain will be permitted to leak through. To this end my invention consists in a construction and arrangement of parts, as hereinafter fully described with reference to the accompanying drawings, in which—

Figure 1 is a front elevation view of my improved grain-door complete. Fig. 2 is an end view of the same. Fig. 3 is a sectional view of the same enlarged, and Figs. 4 and 5 are views showing a modification in the construction thereof.

Similar letters refer to similar parts throughout the several views.

In the said drawings, A represents the door proper, to one end of which is secured a cleat, *b*, in the ordinary manner.

B is a movable cleat, attached at the other end of the door by dovetail-shaped pieces *a a*, on which it slides. Extending from the stationary cleat *b* to a point beyond the center of the door is a piece, C, which is also secured to the door A, with one end resting against the stationary cleat *b*, and provided at the other end with a plate, *p*, through which projects the end of a rod, E, turned down at this point to form a shoulder, which rests against the plate *p*, and is upset or riveted on the other side of the plate to prevent it from pulling through. This rod E at the other end extends through the adjustable cleat B, in which is mortised a nut, *c*, into which the end of the rod E screws, both nut and rod being properly screw-threaded for this purpose.

Extending loosely through the rod E is a small handle-bar, *e*, provided at each end with a small knob, *e'*, to prevent it from falling out and becoming lost. This handle-bar serves to turn the rod E in either direction, and also prevents it from turning or becoming loosened by the motion of the car.

The door A is intended to be placed in position in the car in the ordinary manner, the adjustable cleat B being first moved to suit the size of the car-door by turning the rod E in either direction, which, by screwing into or out of the nut *c*, moves the said cleat backward or forward on the slides *a a*. After the door is properly in place the rod E may be turned until both cleats press tightly against the opposite door-jams, making a perfect joint, which will prevent any leakage of grain.

Instead of using the slides *a a*, the cleat B may be attached to the door A by screws *s*, which pass through slotted holes *h* therein, as shown in Figs. 4 and 5; or they may be attached in any other appropriate manner with the same result.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car grain-door, a stationary cleat, *b*, and a movable cleat, B, provided with a nut, *c*, in combination with a screw-threaded rod, E, substantially as and for the purpose set forth.

2. The combination of a stationary cleat, *b*, a movable cleat, B, with a nut, *c*, mortised therein, slides *a a*, piece C, rod E, and handle-bar *e*, with a door, A, substantially as shown and described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB BRENZEL.

Witnesses:
CLACK S. HARRISON,
FRANK JOHNSON.